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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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2131	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Application Number	Application/Control No.	Applicant(s)/Patent under Reexamination
	10/685,726	ROWLAND, CRAIG H.
	Aravind Moorthy	**Art Unit** 2131

Document Code - AP.PRE.DEC

Notice of Panel Decision from Pre-Appeal Brief Review

This is in response to the Pre-Appeal Brief Request for Review filed <u>Aug. 30, 2007</u>.

1. ☐ **Improper Request** – The Request is improper and a conference will not be held for the following reason(s):

    ☐ The Notice of Appeal has not been filed concurrent with the Pre-Appeal Brief Request.
    ☐ The request does not include reasons why a review is appropriate.
    ☐ A proposed amendment is included with the Pre-Appeal Brief request.
    ☐ Other: .

The time period for filing a response continues to run from the receipt date of the Notice of Appeal or from the mail date of the last Office communication, if no Notice of Appeal has been received.

2. ☒ **Proceed to Board of Patent Appeals and Interferences** – A Pre-Appeal Brief conference has been held. The application remains under appeal because there is at least one actual issue for appeal. Applicant is required to submit an appeal brief in accordance with 37 CFR 41.37. The time period for filing an appeal brief will be reset to be one month from mailing this decision, or the balance of the two-month time period running from the receipt of the notice of appeal, whichever is greater. Further, the time period for filing of the appeal brief is extendible under 37 CFR 1.136 based upon the mail date of this decision or the receipt date of the notice of appeal, as applicable.

    ☒ The panel has determined the status of the claim(s) is as follows:
Claim(s) allowed: _____.
Claim(s) objected to: _____.
Claim(s) rejected: <u>1-21</u>. ✱
Claim(s) withdrawn from consideration: _____.
✱ *See attachment for further explanation of the 102 rejection.*

3. ☐ **Allowable application** – A conference has been held. The rejection is withdrawn and a Notice of Allowance will be mailed. Prosecution on the merits remains closed. No further action is required by applicant at this time.

4. ☐ **Reopen Prosecution** – A conference has been held. The rejection is withdrawn and a new Office action will be mailed. No further action is required by applicant at this time.
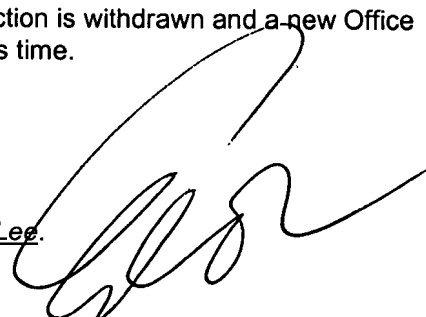
All participants:

(1) *Aravind Moorthy*.

(2) *Chris Revak*.

(3) *Eddie C. Lee*.

(4) _____.

As to claim 1, McClure et al discloses a computerized method for reducing the false alarm rate of network intrusion detection systems, comprising:

receiving, from a network intrusion detection sensor, one or more data packets associated with an alarm indicative of a potential attack on a target host [column 31, lines 19-36]; (McClure discloses that in the decision step 730, the process determines whether all the live target computers have been processed in TCP full connect scanning or whether all the batches of live target computers have been processed in TCP SYN scanning. If all the target computers or all the batches of target computers have been processed, the process ends. Otherwise, the process proceeds to a TCP service scan routine 740 wherein the process uses a TCP service discovery list 742 to identify the TCP service ports to be examined for each target computer. As described above, TCP packets are sent to the identified TCP service ports of each target computer, and the target computer vulnerability database 714 is updated for each target computer in accordance with whether a response is received or is not received from each target computer for each TCP service port scanned and using the known vulnerability database to obtain the vulnerability information for the particular TCP service ports that are determined to be open. Packets are received indicative of vulnerabilities.

identifying characteristics of the alarm from the data packets, including at least an attack type and an operating system fingerprint of the

target host [column 16, lines 3-10; column 18, lines 20-42]; (McClure discloses in the scoring routine 370, described in more detail below, the method establishes a vulnerability score for each target computer and for the network based on the results of the active assessment and based on the vulnerability information in the known vulnerability database 366. The method then proceeds to a reporting routine 372, also described in more detail below, wherein the method reports the results of the scanning, active assessment and scoring. McClure discloses while more than one OS fingerprint may be associated with each operating system, collisions between fingerprints of distinct operating systems have been found to be highly unlikely. Tables can be compiled for other operating systems similar to that shown in Table 2. As operating system versions and popularity change over time, the fingerprint database is advantageously regularly updated to account for patches, version changes, and new operating systems. The fingerprint style shown above is only one embodiment of such a database, and any efficient method to store the operating system fingerprint can be used, based upon the TCP options altered, number of packets typically sent to a target computer, other TCP fields stored for recognition, and identification field used to represent a particular operating system and version, and the like. In one example, a unique data string for a particular operating system is compressed and stored using a digest algorithm such as MD5, and the like. For further example, perfect matching of fingerprints is not required: a system may

employ a percentage match, such as, for example, 90% similarity between two fingerprints, as sufficient to identify a target computer as having a particular operating system or at least being in particular family of operating systems.

identifying the operating system type from the operating system fingerprint [column 18, lines 20-42]; (As discussed above, the operating system is identified from the fingerprint.)

comparing the attack type to the operating system type [column 29, lines 1-13] (McClure discloses target computers that respond positively to this attack are added to a list of vulnerable computers to undergo vulnerability assessment for each open target port found. The vulnerabilities used are typically limited to those associated with the operating system of the target computer as discovered by the operating system identification system described previously, and by those vulnerabilities associated with the open ports found on the target computer. If the operating system of the target computer cannot be conclusively identified, then typically all vulnerabilities associated with the open ports found on the target computer during the service discovery system described herein are tested against the target computer.); and

indicating whether the target host is vulnerable to the attack based on the comparison [column 29, lines 1-13]. (See above)